09/9118,146

Paul tepstein

=> d his

L2

 $L_3$ 

(FILE 'HOME' ENTERED AT 16:54:54 ON 23 NOV 2004)

FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 16:55:09 ON 23 NOV 2004

L1 2631 S C57BL6

774605 S DIABETES OR DIABETIC OR HYPERGLYCEMIA OR HYPOINSULIN?

110 S L1 AND L2

L4 2 S REVIEW AND L3

L5 50 DUP REM L3 (60 DUPLICATES REMOVED)

L6 2 DUP REM L4 (0 DUPLICATES REMOVED)

=> d au ti so pi ab 1-2 16

L6 ANSWER 1 OF 2 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

AU Fukai, Tohru [Reprint author]; Folz, Rodney J.; Landmesser, Ulf; Harrison, David G.

TI Extracellular superoxide dismutase and cardiovascular disease.

SO Cardiovascular Research, (1 August, 2002) Vol. 55, No. 2, pp. 239-249. print.

CODEN: CVREAU. ISSN: 0008-6363.

- AB Excessive production and/or inadequate removal of reactive oxygen species, especially superoxide anion (O2.-), have been implicated in the pathogenesis of many cardiovascular diseases, including atherosclerosis, hypertension, diabetes, and in endothelial dysfunction by decreasing nitric oxide (NO) bioactivity. Since the vascular levels of O2.- are regulated by the superoxide dismutase (SOD) enzymes, a role of SOD in the cardiovascular disease is of substantial interest. Particularly, a major form of SOD in the vessel wall is the extracellular SOD (ecSOD). This review will discuss the characteristics of ecSOD and the role of ecSOD in cardiovascular diseases.
- L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

AU Van Tol, Arie

- TI Phospholipid transfer protein
- SO Current Opinion in Lipidology (2002), 13(2), 135-139 CODEN: COPLEU; ISSN: 0957-9672
- A review. A role for phospholipid transfer protein (PLTP) in HDL remodelling and in the formation of pre- $\beta$ -HDL is now well established, both in vivo and in vitro. Over-expression of human PLTP in C57BL6 mice lowers plasma HDL levels, probably because of increased HDL catabolism. Despite these low HDL levels, plasma from these mice mitigates cholesterol accumulation in macrophages and has increased potential for pre- $\beta$ -HDL formation. Plasma HDL concentration is also decreased in PLTP knockout mice. These intriguing observations can be explained by recent studies that indicate that PLTP is not only involved in remodelling of HDL subfractions but also in VLDL turnover. The role of PLTP in atherogenesis and VLDL synthesis was demonstrated in transgenic mouse models with increased susceptibility for the development of atherosclerosis, bred into PLTP knockout mice. The data clearly show that PLTP can be proatherogenic. As mentioned above, however, PLTP may have antiatherogenic potential in wild-type C57BL6 mice. Information regarding the role and regulation of PLTP in human (patho)physiol. is still relatively sparse but accumulating rapidly. PLTP activity is elevated in diabetes mellitus (both type 1 and type 2), obesity and insulin resistance.

L5 ANSWER 1 OF 50 MEDLINE on STN DUPLICATE 1
AU Zou Ming-Hui; Kirkpatrick Stacy S; Davis Bradley J; Nelson John S; Wiles

<sup>=&</sup>gt; d au ti so 1-50 15

- Walter G 4th; Schlattner Uwe; Neumann Dietbert; Brownlee Michael; Freeman Michael B; Goldman Mitch H
- TI Activation of the AMP-activated protein kinase by the antidiabetic drug metformin in vivo. Role of mitochondrial reactive nitrogen species.
- SO Journal of biological chemistry, (2004 Oct 15) 279 (42) 43940-51. Journal code: 2985121R. ISSN: 0021-9258.
- L5 ANSWER 2 OF 50 MEDLINE on STN DUPLICATE 2
- AU Cooksey Robert C; Jouihan Hani A; Ajioka Richard S; Hazel Mark W; Jones Deborah L; Kushner James P; McClain Donald A
- Oxidative stress, beta-cell apoptosis, and decreased insulin secretory capacity in mouse models of hemochromatosis.
- SO Endocrinology, (2004 Nov) 145 (11) 5305-12. Journal code: 0375040. ISSN: 0013-7227.
- L5 ANSWER 3 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Nicol, Christopher J.; Yoon, Michung; Ward, Jerrold M.; Yamashita, Masamichi; Fukamachi, Katsumi; Peters, Jeffrey M.; Gonzalez, Frank J. [Reprint Author]
- TI PPARgamma influences susceptibility to DMBA-induced mammary, ovarian and skin carcinogenesis.
- SO Carcinogenesis (Oxford), (September 2004) Vol. 25, No. 9, pp. 1747-1755. print.

  CODEN: CRNGDP. ISSN: 0143-3334.
- L5 ANSWER 4 OF 50 MEDLINE on STN DUPLICATE 3
- AU Luan Hongmei; Leitges Michael; Gupta Rita R; Pacheco Daniel; Seidner Andres; Liggett Jessica; Ito Yasuki; Kowluru Renu; Berkowitz Bruce A
- TI Effect of PKCbeta on retinal oxygenation response in experimental diabetes.
- SO Investigative ophthalmology & visual science, (2004 Mar) 45 (3) 937-42. Journal code: 7703701. ISSN: 0146-0404.
- L5 ANSWER 5 OF 50 MEDLINE on STN DUPLICATE 4
- AU Bolduc C; Larose M; Yoshioka M; Ye P; Belleau P; Labrie C; Morissette J; Raymond V; Labrie F; St-Amand J
- TI Effects of dihydrotestosterone on adipose tissue measured by serial analysis of gene expression.
- SO Journal of molecular endocrinology, (2004 Oct) 33 (2) 429-44. Journal code: 8902617. ISSN: 0952-5041.
- L5 ANSWER 6 OF 50 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Matzelle M M; Babensee J E (Reprint)
- Humoral immune responses to model antigen co-delivered with biomaterials used in tissue engineering
- BIOMATERIALS, (JAN 2004) Vol. 25, No. 2, pp. 295-304.
  Publisher: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND.
  ISSN: 0142-9612.
- L5 ANSWER 7 OF 50 MEDLINE on STN DUPLICATE 5
- AU Rooman I; Bouwens L
- Combined gastrin and epidermal growth factor treatment induces islet regeneration and restores normoglycaemia in C57B16/J mice treated with alloxan.
- SO Diabetologia, (2004 Feb) 47 (2) 259-65. Journal code: 0006777. ISSN: 0012-186X.
- L5 ANSWER 8 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Rao, Reena [Reprint Author]; Zhang, Mingzhi; Breyer, Matthew D; Hao,

Chuanming

- TI Role of Cyclooxygenase 2 induction in Lithium (Li+) Induced polyuria.
- SO FASEB Journal, (2004) Vol. 18, No. 4-5, pp. Abst. 673.28. http://www.fasebj.org/. e-file.
  Meeting Info.: FASEB Meeting on Experimental Biology: Translating the Genome. Washington, District of Columbia, USA. April 17-21, 2004. FASEB. ISSN: 0892-6638 (ISSN print).
- L5 ANSWER 9 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Langston, John W [Reprint Author]; Lefer, David J
- TI Acute Metformin Therapy Protects the Liver Against Ischemia-Reperfusion Injury.
- SO FASEB Journal, (2004) Vol. 18, No. 4-5, pp. Abst. 441.2. http://www.fasebj.org/. e-file.
  Meeting Info.: FASEB Meeting on Experimental Biology: Translating the Genome. Washington, District of Columbia, USA. April 17-21, 2004. FASEB. ISSN: 0892-6638 (ISSN print).
- L5 ANSWER 10 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Cardozo, A. K.; Proost, P.; Gysemans, C.; Chen, M.-C.; Mathieu, C.; Eizirik, D. L. [Reprint Author]
- TI IL-1beta and IFN-gamma induce the expression of diverse chemokines and IL-15 in human and rat pancreatic islet cells, and in islets from pre-diabetic NOD mice.
- SO Diabetologia, (February 2003) Vol. 46, No. 2, pp. 255-266. print. CODEN: DBTGAJ. ISSN: 0012-186X.
- L5 ANSWER 11 OF 50 BIOSIS COPYRIGHT ( $\acute{c}$ ) 2004 The Thomson Corporation. on STN
- AU Kang, Elizabeth M. [Reprint Author]; Zickler, Philipp P. [Reprint Author]; Burns, Sean [Reprint Author]; Langemeijer, Saskia [Reprint Author]; Seufert, Caleb [Reprint Author]; Patterson, Noelle; Harlan, David; Tisdale, John F. [Reprint Author]
- TI Hematopoietic stem cell transplantation allows for tolerance of allogeneic islets but does not significantly contribute to organ regeneration.

  SO Blood (November 16 2003) Vol. 100 W. 1110 P. 111
- Blood, (November 16 2003) Vol. 102, No. 11, pp. 213a. print.

  Meeting Info.: 45th Annual Meeting of the American Society of Hematology.

  San Diego, CA, USA. December 06-09, 2003. American Society of Hematology.

  CODEN: BLOOAW. ISSN: 0006-4971.
- L5 ANSWER 12 OF 50 MEDLINE on STN DUPLICATE 6
- AU Shankar Kartik; Vaidya Vishal S; Wang Tao; Bucci Thomas J; Mehendale Harihara M
- TI Streptozotocin-induced **diabetic** mice are resistant to lethal effects of thioacetamide hepatotoxicity.
- Toxicology and applied pharmacology, (2003 Apr 15) 188 (2) 122-34. Journal code: 0416575. ISSN: 0041-008X.
- L5 ANSWER 13 OF 50 MEDLINE on STN DUPLICATE 7
- AU Nagakura Tadashi; Yasuda Nobuyuki; Yamazaki Kazuto; Ikuta Hironori; Tanaka Isao
- TI Enteroinsular axis of db/db mice and efficacy of dipeptidyl peptidase IV inhibition.
- SO Metabolism: clinical and experimental, (2003 Jan) 52 (1) 81-6. Journal code: 0375267. ISSN: 0026-0495.
- L5 ANSWER 14 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Zhang, Li [Reprint Author]; Renaud, Jean-Marc
- TI KATP channel-deficient mice are streptozotocin resistant.
- FASEB Journal, (March 2003) Vol. 17, No. 4-5, pp. Abstract No. 570.4. http://www.fasebj.org/. e-file.

- Meeting Info.: FASEB Meeting on Experimental Biology: Translating the Genome. San Diego, CA, USA. April 11-15, 2003. FASEB. ISSN: 0892-6638 (ISSN print).
- L5ANSWER 15 OF 50 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- ΑU Liu B L; Preisig P A (Reprint)
- Compensatory renal hypertrophy is mediated by a cell cycle-dependent TI
- KIDNEY INTERNATIONAL, (NOV 2002) Vol. 62, No. 5, pp. 1650-1658. SO Publisher: BLACKWELL PUBLISHING INC, 350 MAIN ST, MALDEN, MA 02148 USA. ISSN: 0085-2538.
- ANSWER 16 OF 50 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.  $L_5$ on STN
- ΑU Higgins R D (Reprint); Yan Y; Schrier B K
- Somatostatin analogs inhibit neonatal retinal neovascularization TI
- EXPERIMENTAL EYE RESEARCH, (MAY 2002) Vol. 74, No. 5, pp. 553-559. Publisher: ACADEMIC PRESS LTD ELSEVIER SCIENCE LTD, 24-28 OVAL RD, LONDON NW1 7DX, ENGLAND. ISSN: 0014-4835.
- ANSWER 17 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation.  $L_5$
- Fukai, Tohru [Reprint author]; Folz, Rodney J.; Landmesser, Ulf; Harrison, AU David G.
- Extracellular superoxide dismutase and cardiovascular disease. TΙ
- Cardiovascular Research, (1 August, 2002) Vol. 55, No. 2, pp. 239-249. SO print. CODEN: CVREAU. ISSN: 0008-6363.
- L5 ANSWER 18 OF 50 MEDLINE on STN

DUPLICATE 8

DUPLICATE 9

- ΑU van Tol Arie
- Phospholipid transfer protein. TI
- Current opinion in lipidology, (2002 Apr) 13 (2) 135-9. Ref: 38 SO Journal code: 9010000. ISSN: 0957-9672.
- ANSWER 19 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. L5
- Pearce, N. J. [Reprint author]; Arch, J. R. S. [Reprint author]; Morrison, ΑU A. D. [Reprint author]; Abuin, A. [Reprint author]; Coghlan, M. P. [Reprint author]; Corcoran, S. L. [Reprint author]; Harper, A. J. [Reprint author]; Lister, C. A. [Reprint author]; Llano, A. [Reprint author]; Murphy, G. J. [Reprint author]; Cox, L. Roxbee [Reprint author]; Smith, S. A. [Reprint author]; Taylor, C. M. [Reprint author]; Yates, J. W. [Reprint author]; Holder, J. C. [Reprint author]
- Development of glucose intolerance in male transgenic mice overexpressing TΤ GSK-3beta on a muscle specific promotor.
- Diabetologia, (August, 2002) Vol. 45, No. Supplement 2, pp. A 70. print. SO Meeting Info.: 38th Annual Meeting of the European Association for the Study of Diabetes (EASD). Budapest, Hungary. September 01-05, 2002. European Association for the Study of Diabetes. CODEN: DBTGAJ. ISSN: 0012-186X.
- L5 , AU ANSWER 20 OF 50 MEDLINE on STN
- Koarada S; Wu Y; Ridgway W M
- Increased entry into the IFN-gamma effector pathway by CD4+ T cells selected by I-Ag7 on a nonobese diabetic versus C57BL/6 genetic background.
- Journal of immunology (Baltimore, Md. : 1950), (2001 Aug 1) 167 (3) SO 1693-702. Journal code: 2985117R. ISSN: 0022-1767.
- ANSWER 21 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. L5

STN

- Gysemans, C. A.; Pavlovic, D.; Bouillon, R.; Eizirik, D. L.; Mathieu, C. ΑÜ [Reprint author]
- ΤI Dual role of interferon-gamma signalling pathway in sensitivity of pancreatic beta cells to immune destruction.
- Diabetologia, (May, 2001) Vol. 44, No. 5, pp. 567-574. print. SO CODEN: DBTGAJ. ISSN: 0012-186X.
- L5ANSWER 22 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. STN
- ΑU Herzig, Stephan; Long, Fanxin; Jhala, Ulupi S.; Hendrick, Susan; Quinn, Rebecca; Bauer, Anton; Rudolph, Dorothea; Schutz, Gunther; Yoon, Cliff; Puigserver, Pere; Spiegelman, Bruce; Montminy, Marc [Reprint author]
- CREB regulates hepatic gluconeogenesis through the coactivator PGC-1. TΙ
- SO Nature (London), (13 September, 2001) Vol. 413, No. 6852, pp. 179-183. print. CODEN: NATUAS. ISSN: 0028-0836.
- ANSWER 23 OF 50 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. L5on STN
- ΑU Yossuck P; Tadesse Y Y M; Higgins R D (Reprint)
- Dexamethasone alters TNF-alpha expression in retinopathy ΤI
- MOLECULAR GENETICS AND METABOLISM, (FEB 2001) Vol. 72, No. 2, pp. 164-167. SO Publisher: ACADEMIC PRESS INC, 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA. ISSN: 1096-7192.
- $L_5$ ANSWER 24 OF 50 MEDLINE on STN DUPLICATE 10
- Sitasawad S; Deshpande M; Katdare M; Tirth S; Parab P AU
- Beneficial effect of supplementation with copper sulfate on STZ-TI diabetic mice (IDDM).
- Diabetes research and clinical practice, (2001 May) 52 (2) 77-84. SO Journal code: 8508335. ISSN: 0168-8227.
- ANSWER 25 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on L5STN
- Nielsen, Lars Bo. [Reprint author]; Bollano, Entela; Bartels, Emil Daniel ΑU Overexpression of an apolipoprotein B transgene in the heart prevents TI

cardiac triglyceride accumulation and modulates early signs of diabetic cardiomyopathy in diabetic mice. Circulation, (October 23, 2001) Vol. 104, No. 17 Supplement, pp. II.270.

SO

print. Meeting Info.: Scientific Sessions 2001 of the American Heart Association. Anaheim, California, USA. November 11-14, 2001. American Heart Association.

CODEN: CIRCAZ. ISSN: 0009-7322.

- $L_5$ ANSWER 26 OF 50 MEDLINE on STN DUPLICATE 11
- Livant D L; Brabec R K; Kurachi K; Allen D L; Wu Y; Haaseth R; Andrews P; AU Ethier S P; Markwart S
- The PHSRN sequence induces extracellular matrix invasion and accelerates TΙ wound healing in obese diabetic mice.
- Journal of clinical investigation, (2000 Jun) 105 (11) 1537-45. SO Journal code: 7802877. ISSN: 0021-9738.
- $L_5$ ANSWER 27 OF 50 MEDLINE on STN DUPLICATE 12
- Devedjian J C; George M; Casellas A; Pujol A; Visa J; Pelegrin M; Gros L; ΑU Bosch F
- Transgenic mice overexpressing insulin-like growth factor-II in beta cells TI develop type 2 diabetes.
- SO Journal of clinical investigation, (2000 Mar) 105 (6) 731-40. Journal code: 7802877. ISSN: 0021-9738.
- ANSWER 28 OF 50 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. L5

on STN

- AU Huang C K (Reprint); Zhan L J; Hannigan M O; Ai Y X; Leto T L
- TI P47 (phox) -deficient NADPH oxidase defect in neutrophils of diabetic mouse strains, C57BL6/J-m db/db and db/+
- JOURNAL OF LEUKOCYTE BIOLOGY, (FEB 2000) Vol. 67, No. 2, pp. 210-215.
  Publisher: FEDERATION AMER SOC EXP BIOL, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814-3998.
  ISSN: 0741-5400.
- L5 ANSWER 29 OF 50 MEDLINE on STN
- AU Feng X; Yi S; Hawthorne W J; Patel A T; Walters S N; O'Connell P J
- TI Inducible nitric oxide synthetase is expressed in adult but not fetal pig pancreatic islets.
- SO Xenotransplantation, (2000 Aug) 7 (3) 197-205. Journal code: 9438793. ISSN: 0908-665X.
- L5 ANSWER 30 OF 50 MEDLINE on STN

DUPLICATE 13

- AU Agardh C D; Agardh E; Hultberg B; Ahren B
- TI Long-standing hyperglycemia in C57BL/6J mice does not affect retinal glutathione levels or endothelial/pericyte ratio in retinal capillaries.
- Journal of diabetes and its complications, (2000 May-Jun) 14 (3) 146-53. Journal code: 9204583. ISSN: 1056-8727.
- L5 ANSWER 31 OF 50 MEDLINE on STN

DUPLICATE 14

- AU Sigrist S; Bedoucha M; Boelsterli U A
- Down-regulation by troglitazone of hepatic tumor necrosis factor-alpha and interleukin-6 mRNA expression in a murine model of non-insulin-dependent diabetes.
- SO Biochemical pharmacology, (2000 Jul 1) 60 (1) 67-75. Journal code: 0101032. ISSN: 0006-2952.
- L5 ANSWER 32 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Shankar, K. [Reprint author]; Vaidya, V. S. [Reprint author]; Wang, T. [Reprint author]; Bucci, T. J. [Reprint author]; Mehendale, H. M. [Reprint author]
- TI Diabetic mice are resilient to acetaminophen and thioacetamide hepatotoxicity.
- International Journal of Toxicology, (November-December, 2000) Vol. 19, No. 6, pp. 33. print.

  Meeting Info.: 21st Annual Meeting of the American College of Toxicology. San Diego, California, USA. November 12-15, 2000. American College of Toxicology.

  ISSN: 1091-5818.
- L5 ANSWER 33 OF 50 MEDLINE on STN DUPLICATE 15
- AU Anastasi E; Ponte E; Gradini R; Bulotta A; Sale P; Tiberti C; Okamoto H; Dotta F; Mario U D
- TI Expression of Reg and cytokeratin 20 during ductal cell differentiation and proliferation in a mouse model of autoimmune diabetes.
- SO European journal of endocrinology / European Federation of Endocrine Societies, (1999 Dec) 141 (6) 644-52.

  Journal code: 9423848. ISSN: 0804-4643.
- L5 ANSWER 34 OF 50 MEDLINE on STN
- AU Anastasi E; Dotta F; Tiberti C; Vecci E; Ponte E; Di Mario U
- Insulin prophylaxis down-regulates islet antigen expression and islet autoimmunity in the low-dose Stz mouse model of diabetes.
- SO Autoimmunity, (1999) 29 (4) 249-56. Journal code: 8900070. ISSN: 0891-6934.
- L5 ANSWER 35 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

- AU Molano, R. D. [Reprint author]; Berney, T. [Reprint author]; Ricordi, C. [Reprint author]; Inverardi, L. [Reprint author]
- TI The effects of different enzyme formulations on the outcome of syngeneic transplants of marginal islet mass.
- Cell Transplantation, (March-April, 1999) Vol. 8, No. 2, pp. 185. print. Meeting Info.: Fourth International Congress of the Cell Transplant Society. Montreux, France. March 21-24, 1999. Cell Transplant Society. ISSN: 0963-6897.
- L5 ANSWER 36 OF 50 MEDLINE on STN DUPLICATE 16
- AU Pelegrin M; Devedjian J C; Costa C; Visa J; Solanes G; Pujol A; Asins G; Valera A; Bosch F
- TI Evidence from transgenic mice that interferon-beta may be involved in the onset of diabetes mellitus.
- SO Journal of biological chemistry, (1998 May 15) 273 (20) 12332-40. Journal code: 2985121R. ISSN: 0021-9258.
- L5 ANSWER 37 OF 50 MEDLINE on STN DUPLICATE 17
- AU Kayo T; Koizumi A
- Mapping of murine diabetogenic gene mody on chromosome 7 at D7Mit258 and its involvement in pancreatic islet and beta cell development during the perinatal period.
- SO Journal of clinical investigation, (1998 May 15) 101 (10) 2112-8. Journal code: 7802877. ISSN: 0021-9738.
- L5 ANSWER 38 OF 50 MEDLINE on STN DUPLICATE 18
- AU Papaccio G; De Luca B; Pisanti F A
- TI Macrophages and antioxidant status in the NOD mouse pancreas.
- SO Journal of cellular biochemistry, (1998 Dec 15) 71 (4) 479-90. Journal code: 8205768. ISSN: 0730-2312.
- L5 ANSWER 39 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Flodstrom, M.; Eizirik, D. L.; Sandler, S.
- TI Reduced incidence of multiple-low-dose streptozotocin (MLDS)-induced diabetes in mice lacking the inducible isoform of nitric oxide synthase (iNOS).
- SO Nitric Oxide, (1998) Vol. 2, No. 2, pp. 123. print.
  Meeting Info.: Third International Conference on Biochemistry and
  Molecular Biology of Nitric Oxide. Los Angeles, California, USA. July
  11-15, 1998. Nitric Oxide Society.
  ISSN: 1089-8603.
- L5 ANSWER 40 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Anastasi, E. [Reprint author]; Dotta, F.; Tiberti, C.; Ponte, E.; Di Mario, U.
- TI Down-regulation of islet antigen expression in insulin strategies of prevention in the LD-STZ diabetes model.
- Diabetologia, (1997) Vol. 40, No. SUPPL. 1, pp. A67.
  Meeting Info.: 16th International Diabetes Federation Congress. Helsinki,
  Finland. July 20-25, 1997.
  CODEN: DBTGAJ. ISSN: 0012-186X.
- L5 ANSWER 41 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Chung, Wendy K.; Goldberg-Berman, Judith; Power-Kehoe, Loraine; Leibel, Rudolph L. [Reprint author]
- TI Molecular mapping of the tubby (tub) mutation of mouse chromosome 7.
- SO Genomics, (1996) Vol. 32, No. 2, pp. 210-217. CODEN: GNMCEP. ISSN: 0888-7543.
- L5 ANSWER 42 OF 50 MEDLINE on STN DUPLICATE 19
- AU Martignat L; Elmansour A; Audrain M; Julien J F; Charbonnel B; Sai P

- TI Pancreatic expression of antigens for islet cell antibodies in non-obese diabetic mice.
- SO Journal of autoimmunity, (1995 Aug) 8 (4) 465-82. Journal code: 8812164. ISSN: 0896-8411.
- L5 ANSWER 43 OF 50 MEDLINE on STN DUPLICATE 20

AU Papaccio G; Esposito V; Latronico M V; Pisanti F A

- Administration of a nitric oxide synthase inhibitor does not suppress low-dose streptozotocin-induced diabetes in mice.
- International journal of pancreatology: official journal of the International Association of Pancreatology, (1995 Feb) 17 (1) 63-8. Journal code: 8703511. ISSN: 0169-4197.
- L5 ANSWER 44 OF 50 MEDLINE on STN DUPLICATE 21

AU Papaccio G; Latronico M; Chieffi Baccari G

- TI The immunosuppressant FK506 inhibits the damage to mouse pancreatic islets induced by low dose streptozocin.
- SO Cell and tissue research, (1994 Sep) 277 (3) 573-8. Journal code: 0417625. ISSN: 0302-766X.
- L5 ANSWER 45 OF 50 MEDLINE on STN DUPLICATE 22

AU Papaccio G; Frascatore S; Pisanti F A

- TI An increase in superoxide dismutase counteracts islet vascular alterations in low-dose streptozocin-treated mice.
- SO Histochemistry, (1994 Mar) 101 (3) 215-21. Journal code: 0411300. ISSN: 0301-5564.
- L5 ANSWER 46 OF 50 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AU Watson, Gordon [Reprint author]; Jaussi, Rolf; Tabron, Dorothy; Paigen, Kenneth
- TI The Gus-e locus regulates estrogen repression of androgen-induced beta-glucuronidase expression in mouse kidney.
- SO Biochemical Genetics, (1993) Vol. 31, No. 3-4, pp. 155-166. CODEN: BIGEBA. ISSN: 0006-2928.
- L5 ANSWER 47 OF 50 MEDLINE on STN

DUPLICATE 23

AU Papaccio G

- TI Gangliosides prevent insulitis but not islet B cell destruction in low-dose streptozocin-treated mice.
- Diabetes research and clinical practice, (1993 Jan) 19 (1) 9-15. Journal code: 8508335. ISSN: 0168-8227.
- L5 ANSWER 48 OF 50 MEDLINE on STN

DUPLICATE 24

AU Papaccio G; Chieffi-Baccari G

- TI Alterations of islet microvasculature in mice treated with low-dose streptozocin.
- SO Histochemistry, (1992 May) 97 (4) 371-4. Journal code: 0411300. ISSN: 0301-5564.
- L5 ANSWER 49 OF 50 MEDLINE on STN DUPLICATE 25

AU Papaccio G; Latronico M; Frascatore S; Pisanti F A

- TI Superoxide dismutase in low-dose-streptozocin-treated mice. A dynamic time-course study.
- International journal of pancreatology: official journal of the International Association of Pancreatology, (1991 Nov-Dec) 10 (3-4) 253-60.

  Journal code: 8703511. ISSN: 0169-4197.
- L5 ANSWER 50 OF 50 MEDLINE on STN
- AU Kolb H; Marx-Soho Moume C; Kiesel U
- Administration of a 600 kD molecular fraction from pancreatic islets suppresses immune mediated **diabetes** in mice.
- SO Journal of autoimmunity, (1988 Jun) 1 (3) 243-52.

Journal code: 8812164. ISSN: 0896-8411.

```
(FILE 'HOME' ENTERED AT 16:54:54 ON 23 NOV 2004)
     FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 16:55:09 ON 23 NOV
L1
           2631 S C57BL6
L2
         774605 S DIABETES OR DIABETIC OR HYPERGLYCEMIA OR HYPOINSULIN?
L3
            110 S L1 AND L2
              2 S REVIEW AND L3
L4
L5
             50 DUP REM L3 (60 DUPLICATES REMOVED)
L6
              2 DUP REM L4 (0 DUPLICATES REMOVED)
          71096 S KNOCKOUT(3A) (MOUSE OR MICE)
L7
^{\text{L8}}
            251 S L1 AND L7
L9
              8 S L2 AND L8
              4 DUP REM L9 (4 DUPLICATES REMOVED)
L10
=> d bib ab 1-4 l10
L10 ANSWER 1 OF 4
                       MEDLINE on STN
                                                         DUPLICATE 1
AN
     2004506161
                    IN-PROCESS
DN
     PubMed ID: 15265871
TT
     Activation of the AMP-activated protein kinase by the anti-
     diabetic drug metformin in vivo. Role of mitochondrial reactive
     nitrogen species.
     Zou Ming-Hui; Kirkpatrick Stacy S; Davis Bradley J; Nelson John S; Wiles
AU
     Walter G 4th; Schlattner Uwe; Neumann Dietbert; Brownlee Michael; Freeman
     Michael B; Goldman Mitch H
     Vascular Research Laboratory, Graduate School of Medicine, University of
CS
     Tennessee, Knoxville 37920, USA.. mzou@mc.utmck.edu
     Journal of biological chemistry, (2004 Oct 15) 279 (42) 43940-51.
SO
     Journal code: 2985121R. ISSN: 0021-9258.
CY
     United States
DT
     Journal; Article; (JOURNAL ARTICLE)
LA
     English
FS
     IN-PROCESS; NONINDEXED; Priority Journals
ED
     Entered STN: 20041013
     Last Updated on STN: 20041027
     Metformin, one of the most commonly used drugs for the treatment of type
AΒ
     II diabetes, was recently found to exert its therapeutic
     effects, at least in part, by activating the AMP-activated protein kinase
     (AMPK). However, the site of its action, as well as the mechanism to
     activate AMPK, remains elusive. Here we report how metformin activates
     AMPK. In cultured bovine aortic endothelial cells, metformin
    dose-dependently activated AMPK in parallel with increased detection of
     reactive nitrogen species (RNS). Further, either depletion of
    mitochondria or adenoviral overexpression of superoxide dismutases, as
    well as inhibition of nitric-oxide synthase, abolished the
    metformin-enhanced phosphorylations and activities of AMPK, implicating
    that activation of AMPK by metformin might be mediated by the
    mitochondria-derived RNS. Furthermore, administration of metformin, which
    increased 3-nitrotyrosine staining in hearts of C57BL6, resulted
    in parallel activation of AMPK in the aorta and hearts of C57BL6
    mice but not in those of endothelial nitric-oxide synthase (eNOS)
    knockout mice in which metformin had no effect on
    3-nitrotyrosine staining. Because the eNOS knockout
    mice expressed normal levels of AMPK-alpha that was activated by
    5-aminoimidazole-4-carboxamide riboside, an AMPK agonist, these data
    indicate that RNS generated by metformin is required for AMPK activation
             In addition, metformin significantly increased the
    co-immunoprecipitation of AMPK and its upstream kinase, LKB1, in
    C57BL6 mice administered to metformin in vivo. Using
```

pharmacological and genetic inhibitors, we found that inhibition of either

c-Src or PI3K abolished AMPK that was enhanced by metformin. We conclude that activation of AMPK by metformin might be mediated by mitochondria-derived RNS, and activation of the c-Src/PI3K pathway might generate a metabolite or other molecule inside the cell to promote AMPK activation by the LKB1 complex.

- L10 ANSWER 2 OF 4 MEDLINE on STN
- AN 2004095586 MEDLINE
- DN PubMed ID: 14985314
- Effect of PKCbeta on retinal oxygenation response in experimental TI
- Luan Hongmei; Leitges Michael; Gupta Rita R; Pacheco Daniel; Seidner Andres; Liggett Jessica; Ito Yasuki; Kowluru Renu; Berkowitz Bruce A
- Departments of Anatomy and Cell Biology, Wayne State University, Detroit, Michigan 48201, USA.
- NCR01EY10221 (NEI)
- Investigative ophthalmology & visual science, (2004 Mar) 45 (3) 937-42. SO Journal code: 7703701. ISSN: 0146-0404.
- CY United States
- DTJournal; Article; (JOURNAL ARTICLE)
- LA English
- FS Priority Journals
- EM200403
- Entered STN: 20040302 ED Last Updated on STN: 20040319
- Entered Medline: 20040318 PURPOSE: To test the hypotheses that, in mice, breathing carbogen (95% AB O(2)-5% CO(2)) oxygenates the retina better than breathing 100% oxygen, the superior hemiretinal oxygenation response to carbogen inhalation is subnormal early in diabetes, and diabetes-induced

elevation of retinal protein kinase C (PKC)-beta contributes to this pathophysiology. METHODS: Retinal oxygenation response (DeltaPO(2)) was measured using functional magnetic resonance imaging (MRI) and either carbogen or 100% oxygen inhalation challenge in C57BL/6J control (C) mice. Retinal DeltaPO(2) during carbogen breathing was also measured in PKCbeta knockout (C57BL6-Prkcb1; [KO]), 4 month C57BL/6J

diabetic (D), and 4-month diabetic PKCbeta KO (D+KO) mice. Retinal PKCbeta protein expression was assessed by Western analysis. RESULTS: In C mice, retinal DeltaPO(2) during carbogen breathing was significantly greater (P < 0.05) than during oxygen breathing. In D mice, DeltaPO(2) during carbogen breathing was significantly lower than normal in the superior, but not the inferior, hemiretina and was normal (P > 0.0 5) in the KO group. In the D+KO mice DeltaPO(2) was normal (P > 0.05) only at distances less than 1.5 mm from the optic nerve head. PKCbeta expression was elevated in the retina in diabetes (P < 0.05), but was significantly decreased (P < 0.05) in D+KO mice. CONCLUSIONS: The present study confirms that, in the mouse, retinal DeltaPO(2) patterns during different inhalation challenges or in the presence of diabetes are similar to what has been reported in rats. Diabetes-induced elevation of PKC appears to contribute only focally to subnormal retinal DeltaPO(2). This raises the possibility that PKC inhibition therapy may be only regionally effective in treating retinal pathophysiology associated with diabetic

L10 ANSWER 3 OF 4 MEDLINE on STN

DUPLICATE 2

- AN 2002159650 MEDLINE
- DN PubMed ID: 11891415

retinopathy.

- TIPhospholipid transfer protein.
- ΑU van Tol Arie
- Department of Biochemistry, Cardiovascular Research Institute COEUR, CS Erasmus University Rotterdam, Rotterdam, The Netherlands.. vantol@bc1.fgg.eur.nl
- SO Current opinion in lipidology, (2002 Apr) 13 (2) 135-9. Ref: 38

Journal code: 9010000. ISSN: 0957-9672.

CY England: United Kingdom

DTJournal; Article; (JOURNAL ARTICLE) General Review; (REVIEW) (REVIEW, TUTORIAL)

LA English

FS Priority Journals

EΜ 200208

EDEntered STN: 20020314 Last Updated on STN: 20020814 Entered Medline: 20020813

- A role for phospholipid transfer protein (PLTP) in HDL remodelling and in AB the formation of pre-beta-HDL is now well established, both in vivo and in vitro. Over-expression of human PLTP in C57BL6 mice lowers plasma HDL levels, probably because of increased HDL catabolism. Despite these low HDL levels, plasma from these mice mitigates cholesterol accumulation in macrophages and has increased potential for pre-beta-HDL formation. Plasma HDL concentration is also decreased in PLTP knockout mice. These intriguing observations can be explained by recent studies that indicate that PLTP is not only involved in remodelling of HDL subfractions but also in VLDL turnover. The role of PLTP in atherogenesis and VLDL synthesis was demonstrated in transgenic mouse models with increased susceptibility for the development of atherosclerosis, bred into PLTP knockout mice. data clearly show that PLTP can be proatherogenic. As mentioned above, however, PLTP may have antiatherogenic potential in wild-type C57BL6 mice. Information regarding the role and regulation of PLTP in human (patho)physiology is still relatively sparse but accumulating rapidly. PLTP activity is elevated in diabetes mellitus (both type 1 and type 2), obesity and insulin resistance.
- ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. L10

AN2001:283432 BIOSIS

DN PREV200100283432

- Dual role of interferon-gamma signalling pathway in sensitivity of TIpancreatic beta cells to immune destruction.
- ΑU Gysemans, C. A.; Pavlovic, D.; Bouillon, R.; Eizirik, D. L.; Mathieu, C. [Reprint author]
- LEGENDO, UZ Gasthuisberg O and N, Herestraat 49, B-3000, Leuven, Belgium CS SO

Diabetologia, (May, 2001) Vol. 44, No. 5, pp. 567-574. print. CODEN: DBTGAJ. ISSN: 0012-186X.

DTArticle

LΑ English

ED Entered STN: 13 Jun 2001 Last Updated on STN: 19 Feb 2002

Aims/hypothesis: Disruption of the interferon-gamma (IFN-gamma) signalling AΒ pathway at the level of interferon regulatory factor-1 (IRF-1) protects islets against cytokine-induced nitric oxide production and cell death in vitro. The aim of this study was to investigate the effects of a global disruption of IFN-gamma signalling, or a selective disruption of IRF-1, on beta-cell sensitivity to in vivo immune destruction. Methods: In a first set of experiments, IFN-gamma receptor knockout mice (IFN-gammaR-/-) and interferon regulatory factor-1 knockout mice (IRF-1-/-) were rendered diabetic by injections of 50 mg streptozotocin i.p. on 5 consecutive days (MLDSTZ). Results: Whereas no difference in sensitivity to MLDSTZ-induced diabetes could be observed between IFN-gammaR-/- mice and their 129/Sv/Ev controls (50% vs 55%, NS), there was an increased incidence of  $\bf diabetes$  in IRF-1-/- mice (100% vs 67% in C5781/6 mice, p < 0.05). A similar increased sensitivity to immune destruction of IRF-1-/- islets was observed when these islets were used as allografts. Islet graft survival rate of IFN-gammaR-/- and 129/Sv/Ev islets, when transplanted in alloxandiabetic BALB/c recipients, was comparable (12.0 +- 1.9 days vs 12.9 +- 2.3 days, NS). Allograft rejection, however, of IRF-1-/- islets

by BALB/c recipients occurred more rapidly than following transplantation to their C57Bl/6 controls (9.1 +- 2.0 days vs 13.1 +- 1.5 days, p < 0.003). Conclusions/interpretation: These data indicate that IFN-gamma signal transduction at the beta-cell level is not essential for immune beta-cell destruction in vivo. Moreover, disruption of the IRF-1 gene in pancreatic islets increases susceptibility to beta-cell killing, suggesting that IRF-1 might be necessary for the expression of putative beta-cell "defence and/or repair" genes.

=>